



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,558	03/29/2004	Geun-soo Lee	29925/39912	1407

4743 7590 03/10/2006

MARSHALL, GERSTEIN & BORUN LLP
233 S. WACKER DRIVE, SUITE 6300
SEARS TOWER
CHICAGO, IL 60606

EXAMINER

LEE, SIN J

ART UNIT PAPER NUMBER

1752

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/811,558	Applicant(s) LEE ET AL.	
	Examiner Sin J. Lee	Art Unit 1752	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: 1-6 and 13-15.
 Claim(s) objected to: 11 and 12.
 Claim(s) rejected: 7-12.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
 13. ☒ Other: See attached Detailed Action.

Sin J. Lee

Sin J. Lee
 Primary Examiner
 Art Unit: 1752

DETAILED ACTION

Claim Objections

1. Claims 11 and 12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 11 uses the transitional phrase "comprises" whereas present claim 7, from which claim 11 depends, has been narrowed to recited "consisting essentially of", and thus claims 11 and 12 fail to further limit the subject matter of claim 7.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 7, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al (US 6,590,137 B2).

Mitchell teaches (claim 1) a multicomponent superabsorbent particle comprising at least one basic water-absorbing resin in contact with at least one acidic water-absorbing resin. As one of the examples for the acidic water-absorbing resin, Mitchell teaches (claim 19) a *polyvinylphosphonic acid*. Mitchell also teaches (col.17, lines 21-28, lines 36-40) multicomponent superabsorbent particles having microdomains of the acidic resin and the basic resin dispersed in a continuous phase of a matrix resin, and as one of examples for the matrix resin, Mitchell teaches *polyvinyl alcohol*. Based on Mitchell's teaching, it would have been obvious to one skilled in the art to form

multicomponent superabsorbent particles having microdomains of polyvinylphosphonic acid (as the acidic water-absorbing resin) and the basic water-absorbing resin dispersed in a continuous phase of polyvinyl alcohol (as a matrix resin) with a reasonable expectation of obtaining superabsorbent particles that exhibit exceptional water absorption. Also, Mitchell teaches polyvinylamine as one of examples for his basic resin (claim 15). It would have been obvious to one skilled in the art to use polyvinylamine as Mitchell's basic water-absorbing resin with a reasonable expectation of obtaining superabsorbent particles that exhibit exceptional water absorption.

Mitchell's composition containing polyvinylphosphonic acid (as his acidic water-absorbing resin), *polyvinyl alcohol* (as his matrix resin) and *polyvinylamine* (as his basic resin) would render obvious present inventions of claims 7, 11, and 12: It is the Examiner's position that Mitchell's polyvinylamine would not materially affect the characteristics of present composition of claim 7 because applicants are also claiming an amine compound in present claims 11 and 12. Also, it is the Examiner's position that Mitchell's particles comprising polyvinylphosphonic acid, polyvinyl alcohol and polyvinylamine would inherently be capable of being used as an organic anti-reflective coating composition.

4. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mougin (6,159,457).

In claim 2, Mougin teaches the following:

2. A method for coating keratinous substances, said method comprising:
- coating said keratinous substance with a cosmetic or dermatological composition comprising an aqueous solution or an aqueous dispersion containing:
 - (a) at least one non-crosslinked polymer capable of forming, after is drying, a deposit or a film on said keratinous substances, said polymer exhibiting a critical temperature T_c for solubility in water of the LCST or UCST type ranging from 0° to 100° C.; and
 - (b) at least one surfactant and/or at least one hydrophilic polymer, said at least one surfactant and said at least one hydrophilic polymer not exhibiting a critical temperature T_c of the LCST or UCST type ranging from 0° to 100° C.,
- wherein said at least one surfactant and/or said at least one hydrophilic polymer is capable of establishing a physical interaction with said at least one non-crosslinked polymer.

As example for the "at least one hydrophilic polymer", Mougin includes polyvinyl alcohol and polyvinylphosphonic acid polymer (see col.5, lines 13-35). Since Mougin teaches that there can be at least one hydrophilic polymer, it would have been obvious to one skilled in the art to use both polyvinyl alcohol and polyvinylphosphonic acid as the hydrophilic polymers in Mougin's composition with a reasonable expectation of obtaining a film exhibiting satisfactory mechanical and cosmetic properties which do not change in the envisaged cosmetic application. Also, as one of the examples for the non-crosslinked polymer, Mougin discloses polyvinyl alcohol (see col.4, lines 17-20, lines 39-40). It would have been obvious to one skilled in the art to use polyvinyl alcohol as Mougin's non-crosslinked polymer with a reasonable expectation of obtaining a film exhibiting satisfactory mechanical and cosmetic properties which do not change in the envisaged cosmetic application. Mougin also teaches (col.5, lines 36-41) that those hydrophilic polymers are present in the composition in the preferred amount of 10-30% by weight. Assuming one uses the polyvinyl alcohol and polyvinylphosphonic acid in equal amount, this will give 5-15% by weight for each polymer. Mougin also teaches

amine salts and ammonium salts as some of examples of the surfactant to be used in his composition discussed above (see col.5, lines 52-61). Thus, *Mougin's composition containing polyvinyl alcohol (as Mougin's non-crosslinked polymer), polyvinyl alcohol and polyvinylphosphonic acid polymer (as Mougin's hydrophilic polymer), and amine salts (as Mougin's surfactant)* renders obvious present inventions of claims 7-12. It is the Examiner's position that Mougin's amine salts would not materially affect the characteristics of present composition of claim 7 because applicants are also claiming an amine compound in present claims 11 and 12. It is also the Examiner's position that Mougin's composition comprising polyvinylphosphonic acid, polyvinyl alcohol and amine salts would inherently be capable of being used as an organic anti-reflective coating composition.

Allowable Subject Matter

5. Claims 1-6 and 13-16 are allowed. None of the cited prior arts teaches or suggests present method of forming a pattern as claimed in present claim 1 or claim 13.

Response to Arguments

6. Applicants argue that Mitchell's composition and Mougin's composition must contain additional materials required for the intended uses and that those additional materials would materially affect the characteristics of the present coating composition. ,

However, even if those additional materials mentioned in Mitchell and Mougin were to materially affect the characteristics of present coating composition, those additional materials are not required materials in those references. The only constitutional elements in Mitchell's particle composition are basic water-absorbing

resin, acidic water absorbing resin and a matrix resin. As already discussed above, polyvinylamine, which is disclosed as one of examples for Mitchell's basic resin, would not materially affect the characteristics of present coating composition because applicants themselves are claiming an amine compound in claims 11 and 12. Also, Mougin specifically states that his invention *can* (not "must") contain adjuvants usually found in the cosmetic and dermatological fields (col.7, lines 61-63). Therefore, it is still the Examiner's position that *Mitchell's composition containing polyvinylphosphonic acid* (as his acidic water-absorbing resin), *polyvinyl alcohol* (as his matrix resin) and *polyvinylamine* (as his basic resin) would render obvious present inventions of claims 7, 11, and 12 and that Mitchell's particles comprising polyvinylphosphonic acid, polyvinyl alcohol and polyvinylamine would inherently be capable of being used as an organic anti-reflective coating composition. Also, it is still the Examiner's position that *Mougin's composition containing polyvinyl alcohol* (as Mougin's non-crosslinked polymer), *polyvinyl alcohol and polyvinylphosphonic acid polymer* (as Mougin's hydrophilic polymer), and *amine salts* (as Mougin's surfactant) renders obvious present inventions of claims 7-12 and that Mougin's composition comprising polyvinylphosphonic acid, polyvinyl alcohol and amine salts would inherently be capable of being used as an organic anti-reflective coating composition.

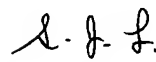
For the reasons stated above, present rejections over Mitchell and Mougin still stand.

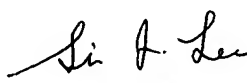
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333.

The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


S. Lee
March 8, 2006


SIN LEE
PRIMARY EXAMINER